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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,360	03/19/2004	Roger Farnholtz	1001.1690102	9216

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CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

EXAMINER	
BHATIA, AARTI	

ART UNIT	PAPER NUMBER
3763	

MAIL DATE	DELIVERY MODE
06/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/804,360	FARNHOLTZ, ROGER	
	Examiner	Art Unit	
	AARTI BHATIA	3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/25/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-22,24-26,28-35,37 and 38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-22,24-26,28-35,37 and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is the third Office Action based on the 10/804,360 application filed on 3/19/2004. Claims 19-22, 24-26, 28-35, and 37-38, as amended on 4/25/2008, are currently pending and have been considered below.

Response to Amendment

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19, 20, 21, 22, 24, 26, 28, 29, 30, 31, 32, 33, 35, 37, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No 5,228,441 to Lundquist.

3. Lundquist discloses the following:

19. A medical device, comprising: a proximal shaft section (31) and a distal shaft section extending distally of the proximal shaft section; the proximal shaft section includes a tubular proximal shaft section having a proximal end (32) and a distal end (33); a plurality of slits defined in the proximal tubular shaft section ; wherein a greater number of slits are disposed near the distal end of the proximal tubular shaft section than near the proximal end of the proximal tubular shaft section (column 4, lines 20-37); a distal shaft section (54) attached to the proximal shaft section, the distal shaft section including a braid attached to the distal end of the proximal tubular shaft section; wherein

the braid overlaps the distal end of the tubular shaft such that a portion of the braid is located proximal of the distal end of the tubular shaft (see figure below); and a polymer layer (46) disposed over the proximal and distal shaft sections tubular shaft and the braid (column 4, lines 38-40).

20. The medical device of claim 19, wherein the distal shaft section is deflectable (column 5, lines 33-36).

21. The medical device of claim 19, wherein proximal shaft section the tubular shaft has a longitudinal axis and wherein the slits are arranged generally perpendicular to the longitudinal axis (see figure 4).

22. The medical device of claim 19, wherein the medical device has a transition in stiffness from the proximal shaft section to the distal shaft section (it is inherent that the stiffness of a slotted tube and a braided member are different since they constructed differently).

24. The medical device of claim 19, wherein the number of slits per unit length is greater near the distal end of the tubular shaft than near the proximal end of the tubular shaft (column 4, lines 20-37).

26. The medical device of claim 19, wherein the tubular shaft is a nickel-titanium alloy tube (column 9, lines 47-51).

28. A medical device, comprising: a proximal shaft portion (31) and a distal shaft portion (54); the proximal shaft portion including a tubular member having a proximal end (32) and a distal end (33), the tubular member including a plurality of slits (41) defined in the tubular member; the distal shaft portion including a braid (54), the braid

attached to the tubular member and extending distally therefrom (column 5, lines 12-24); wherein the braid overlaps the distal end of the tubular member such that a portion of the braid is located proximal of the distal end of the tubular member (see figure below); and a polymer layer (46) disposed over the tubular member and the braid (column 4, lines 38-40).

29. The medical device of claim 28, wherein the distal shaft portion is deflectable (column 5, lines 33-36).

30. The medical device of claim 28, wherein the tubular member has a longitudinal axis and wherein the slits are arranged generally perpendicular to the longitudinal axis (see figure 4).

31. The medical device of claim 28, wherein the medical device has a transition in stiffness from the proximal shaft portion to the distal shaft portion (it is inherent that the stiffness of a slotted tube and a braided member are different since they constructed differently).

32. The medical device of claim 28, wherein a greater number of slits are disposed near the distal end of the tubular member than near the proximal end of the tubular member (column 4, lines 20-27).

33. The medical device of claim 28, wherein the number of slits per unit length is greater near the distal end of the tubular member than near the proximal end of the tubular member (column 4, lines 20-27).

35. The medical device of claim 28, wherein the tubular member is a nickel-titanium alloy tube (column 9, lines 47-51).

37. A medical device, comprising: a slotted tubular member (31) having a plurality of slots (41) therein, the slotted tubular member having a proximal end (32), a distal end (33), and a longitudinal axis; wherein the slots vary in number, location, frequency, size, or depth so that the tubular member varies in stiffness between the proximal end and the distal end (column 4, lines 20-37); a braid (54) attached to the distal end of the tubular member and extending distally therefrom (column 5, lines 12-24); wherein the braid overlaps the distal end of the tubular member such that a portion of the braid is located proximal of the distal end of the tubular member (see figure below); and a polymer layer (46) disposed over the tubular member and the braid so as to define a catheter shaft (column 4, lines 38-40).

38. The medical device of claim 37, wherein the slots defined are arranged generally perpendicular to the longitudinal axis (see figure 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundquist in view of U.S. Patent No. 5,437,288 to Schwartz.

Lundquist discloses the medical device of claims 19 and 28, and teaches that there can be variation in the number, frequency, and location of slits (column 4, lines 20-37) but fails to disclose wherein the depth of slits is greater near the distal end/junction of the proximal shaft section than near the proximal end/junction of the proximal shaft section.

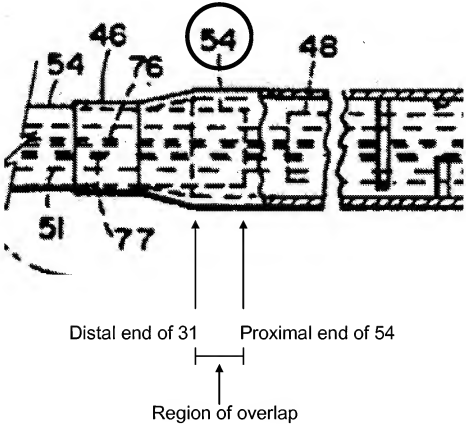
Schwartz teaches a flexible catheter (figure 2), where the depth of slits (14) becomes greater when moving from the proximal end (11) to the distal end (12) (column 4, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the flexible catheter of Lundquist with the variable depth slits of Schwartz because by increasing the depth of the grooves, the flexibility of the flexible portion nearest the distal end is increased (column 4, lines 8-11).

Response to Arguments

5. Applicant's arguments filed 4/25/2008 have been fully considered but they are not persuasive.

6. Applicant argues that there is no overlap between braided member 54 and slotted tube 31 of Lundquist. The Examiner disagrees. It is clear from figure 3, that there is indeed an overlapping section. As Applicant notes, a Line 56 cannot be

identified in this figure, however, the Examiner interprets the area indicated by dashed lines at numeral 54 (the one circled below) depicts the overlapping section in figure 3 (portion of figure 3 shown below).



Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARTI BHATIA whose telephone number is (571)270-5033. The examiner can normally be reached on Monday-Thursday 8:00am -6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on (571) 272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aarti Bhatia/
Examiner, Art Unit 3763

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763